B4

<110> ELI LILLY and COMPANY

<120> Glucagon-Like Peptide-1 Crystals

<130> X-10242A

<150> US 60/069,728
<151> 1997-12-16

<160> 25

<170> PatentIn version 3.1

<210> 1
<211> 31
<212> PRT
<213> Homo sapiens

Okay to enter JER 11-5-2002

<400> 1

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 2
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

40

B

<220>

<221> Misc_feature

<222> (1)..(1)

<223> Xaa at position 1 is L-histidine, D-histidine, or a modified residue

<220>

<221> MOD_RES

<222> (1)..(1)

<223> Xaa at position 1 is desamino, histidine, 2-amino-histidine, beta-hydroxy-histidine, homohistidine, alpha-fluoromethyl-histidine, or alpha-methyl-histidine

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa at position 2 is Ala, Gly, Val, Thr, Met, Ile, or a modified residue

<220>

<221> MOD_RES

<222> (2)..(2)

<223> Xaa at position 2 is alpha-methyl-Ala

<220>

<221> MISC_FEATURE

<222> (15)..(15)

<223> Xaa at position 15 is Glu, Gln, Ala, Thr, Ser, or Gly

<220>

<221> MISC_FEATURE

<222> (21)..(21)

<223> Xaa at position 21 is Glu, Gln, Ala, Thr, Ser, or Gly

<220>

<221> MISC_FEATURE

<222> (31)..(31)

<223> Xaa at position 31 is Gly or absent

<220>

<221> MOD_RES

<222> (30)..(30)

<223>

<400> 2

Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Xaa Gly
1 5 10 15

Gln Ala Ala Lys Xaa Phe Ile Ala Trp Leu Val Lys Gly Arg Xaa
20 25 30

<210> 3

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> MISC_FEATURE

<222> (28)..(28)

<223> Xaa at position 28 is Lys or absent

<220>

<221> MISC_FEATURE

<222> (29)..(29)

<223> Xaa at position 29 is absent or is Gly when Xaa at position 28 is Lys

<400> 3

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa
20 25

<210> 4

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa at position 1 is 4-imidazopropionyl, 4-imidazoacetyl, or 4-im
idazo-a, a dimethyl-acetyl

<220>

<221> MISC_FEATURE

<222> (20)..(20)

<223> Xaa at position 20 is Lys or Arg

<220>

<221> MISC_FEATURE

<222> (31)..(31)

<223> Xaa at position 31 is Gly-OH or NH2

<400> 4

Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Xaa
20 25 30

B

<210> 5

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 5

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 6

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 6

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys
20 25

<210> 7

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

44

B

<400> 7

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 8

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 8

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
20 25 30

<210> 9

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 9

His Ala Gln Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 10

<211> 31

<212> PRT

45

B

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa at position 3 is D-Gln

<400> 10

```
His Ala Xaa Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1               5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
            20                  25                  30
```

<210> 11

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 11

```
His Ala Glu Gly Thr Phe Thr Ser Asp Thr Ser Lys Tyr Leu Glu Gly
1               5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
            20                  25                  30
```

<210> 12

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 12

```
His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Lys Tyr Leu Glu Gly
1               5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
            20                  25                  30
```

<210> 13

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 13

```
His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1               5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
            20                  25                  30
```

<210> 14

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 14

```
His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1               5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
            20                  25                  30
```

<210> 15

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 15

His Met Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 16

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa at position 3 is acetyl-Lys

<400> 16

His Ala Xaa Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 17

<211> 31

<212> PRT

<213> Artificial Sequence

48

B

<220>

<223> Synthetic Construct

<400> 17

His Ala Thr Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 18

<211> 31

<212> PRT

<213> Artificial Sequence

<220> ——

<223> Synthetic Construct

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa at position 3 is D-Thr

<400> 18

His Ala Xaa Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 19

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 19

49

B

His Ala Asn Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 20

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa at position 3 is D-Asn

<400> 20

His Ala Xaa Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 21

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 21

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Ser
1 5 10 15

Arg Arg Ala Gln Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

51

B

<210> 22

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 22

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Arg Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 23

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 23

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Arg Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 24

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa at position 2 is alpha-methyl-Ala

<400> 24

```
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1               5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
            20                  25                  30
```

<210> 25

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 25

```
His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Gln Gly
1               5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
            20                  25                  30
```


53